

Open Source Implementation in Education

Software Solution Saves Dollars

By Andrew Trotter

September 29, 2004

Education Week

<http://www.edweek.org/ew/articles/2004/09/29/05linux.h24.html>

A growing number of cost-conscious school districts are finding budget relief in low-cost computer software known as “open source” that can do everything from manage school Web sites to equip classrooms for learning.

Administrators cite open-source-related savings of hundreds of dollars per new computer, plus benefits such as reduced exposure to computer viruses and to copyright violations.

...As reviewed in CoSN Newsletter Winter 2005

The use of "free" open source software such as Linux on servers, Open Office for personal productivity, and various network and Web management offerings allows school districts the opportunity to save considerable money on software purchases. Some concerns about the pervasive use of open source software include:

Availability of applications to run under/with the open software offering

Availability of support technicians

Robustness of security

Lack of formal support, as would be provided by a vendor

Selective use of open source software can provide savings (when looking at all costs from a TCO perspective). A district should review open source software opportunities by application area, but with the understanding of support, training and integration implications of adding yet another application or operating system.

To see how one small district implemented Linux and Open Office, look at CoSN's Missouri district TCO case study (classroomtco.cosn.org/missouri.pdf).

Linux Making Headway in Primary Education

By Susan B. Shor

LinuxInsider

11/01/04 5:00 AM PT

<http://www.linuxinsider.com/story/Linux-Gaining-K-12-Ground-but-More-Software-Needed-37585.html>

A recent Quality Education Data report found that 19 percent of schools surveyed were beginning to experiment with Linux on their servers. That's not many compared to Windows-based systems' presence in 86 percent of schools and the availability of Apple's OS9 and OSX in 34 percent.

Organizations Supporting Open Source Solutions in Schools

The **K-12Linux project** is just one of many Open Source based groups working with schools. For a complete listing see <http://schoolforge.net> the repository for software, lesson plans and projects

K12 Linux Terminal Server Project: Hundreds of users of the K12-LTSP distribution all over the world tell how they are using linux terminals in their schools.

<http://www.k12ltsp.org/casestudy.html>

Open Source Schools

<http://opensourceschools.org>

There is a substantial open source educational application development community.

SEUL/edu (Simple End-User Linux/educational applications) has been absorbed into the SchoolForge coalition where general discussion of the use of Linux and open resources in education takes place. <http://www.seul.org/edu>

Schoolforge's mission is to unify independent organizations that advocate, use, and develop open resources for primary and secondary education. Schoolforge is intended to empower member organizations to make open educational resources more effective, efficient, and ubiquitous by enhancing communication, sharing resources, and increasing the transparency of development. Schoolforge members advocate the use of open source and free software, open texts and lessons, and open curricula for the advancement of education and the betterment of humankind.

<http://schoolforge.net>

Seul/Edu Educational Application Index

<http://richtech.ca/seul/index.php>

There are 663 educational applications in 24 categories.

Implementation histories of Linux in Schools

<http://casestudy.seul.org/cgi-bin/caseview0.pl>

There are 74 case histories at a wide variety of schools and districts mostly in the US but also around the world.

Abraham Lincoln Binational Center (Cuenca, Ecuador)
Alexander Sinton High School (Athlone, Cape Town, South Africa)
bangkokyaischool (near watarun)
Battlefords School Division (Battlefords area, Saskatchewan Canada)
Beechwood Schools Ltd (Streatham, South London (UK))
Blue Ridge School (Jackson County, NC)
býlal ()
Cesar Chavez Public Charter High School for Public Policy (Washington, DC)
ChangAn Middle School (DongGuan city,GuangDong Province,China)
Charter Conservatory for Liberal Arts and Technology (Statesboro, Georgia)
Chase Academy (Cannock, WS11 0UR, UK)
Collegium Charter School (West Chester, PA, USA)
Distance Student at www.accis.edu (Alabama (I'm in Mount Joy, Pennsylvania))
duPont Manual High School (Louisville, KY USA)
East Granby, CT School System (East Granby, CT, USA)
Ecole primaire La Futaie (Watermael-Boitsfort, Belgium)
EESS (MIRACEMA)
Elementary School (Pribeta, Slovak republic, Europe)
Escuela Normal (Zacatecas, Mexico)
Gilbert Unified School District (Gilbert, Arizona)
GIMNASIO FIDEL (Bogota, Colombia)
Glenwood R-8 (West Plains, MO, USA)
Goa Schools Computers Project (GSCP) (Goa state, India)
Gould Academy (Bethel, ME)
Government High Schools, Kannur (Kerala State, INDIA) (Kannur District, Kerala, INDIA)
Grants Pass High School (Grants Pass, Oregon)
Greater Houlton Christian Academy (Houlton, ME)

<u>Gymnasium Isernhagen</u> (Isernhagen, Germany)
<u>H. Hardcastle School</u> (Edam, Sk. Canada)
<u>Hans Böckler Berufskolleg</u> (45770 Marl, germany)
<u>Hector Thiboutot Community School</u> (Sandy Bay, Saskatchewan, Canada)
<u>Holy Infancy School</u> (Bethlehem, PA, USA)
<u>Høle primary and secondary school</u> (Vest of Norway)
<u>IETI</u> (alabang)
<u>Lake Brantley High School</u> (Altamonte Springs, FL USA)
<u>LRE EgoCreanet</u> (Italy)
<u>Lyneham High School</u> (Canberra ACT Australia)
<u>Marbury School</u> (Aldgate South Australia)
<u>Mead High School</u> (Spokane WA)
<u>Monarch Park Collegiate</u> (Toronto, Ontario)
<u>Nanjing Normal Univisity</u> (China)
<u>New Jerusalem Christian Academy</u> (Seffner, Florida)
<u>Newton-le-Willows High School</u> (UK)
<u>Nooitgedacht Primary School</u> (Bishop Lavis,Cape Town, South Africa)
<u>Orwell High School</u> (Felixstowe, Suffolk UK)
<u>Overseas Family School</u> (Singapore)
<u>Pasco School District</u> (Pasco, WA)
<u>Pocatello Community Charter School</u> (Pocatello, Idaho, USA)
<u>Ponderosa High School</u> (Parker, Colorado)
<u>Portland Adventist Academy</u> (Portland, OR)
<u>Revai Miklos Secondary Grammar School</u> (Gyor, Hungary)
<u>Riverdale High School</u> (Portland, OR)
<u>School District #73 Kamloops/Thompson</u> (Kamloops, British Columbia, Canada)
<u>Science Academy of Austin (LBJ High School)</u> (Austin, Texas)
<u>Seven Oaks School Division No.10</u> (Winnipeg, Manitoba, Canada)
<u>Skegness Grammar School</u> (Skegness, England)
<u>Southern Durham High School</u> (Durham, NC USA)

Southern High School (800 Clayton, Durham, NC 27703)
St Mary's Church of England Primary School (Station Road, Hinckley, Leicestershire, UK)
St. Dunstan's Community School (Glastonbury England UK)
St. Gregory College Preparatory School (Tucson, Arizona)
Strathcona Baptist Girls Grammar School (Melbourne - Australia)
Technological Educational Institution of Athens (Egaleo - Athens - Greece)
TEI of Thessaloniki (Thessaloniki Greece)
The Beacon School (New York City, NY, USA)
Theodor Heuss Schule (Germany, Herten)
university of huddersfield (united kingdom)
University of Northern Iowa (Cedar Falls, Iowa)
Victory Christian School (St. Louis, MO)
Vienna Adventist Academy (Vienna, VA, USA)
volksschulen tirol (tirol/austria)
Warren Easton High School (New Orleans, LA)
Weaver Education Center (Greensboro, NC)
Yorktown High School (Arlington, VA, U.S.A.)

One of the most recent developments in open source: Open Source Textbooks

Open-Education: Open Source Textbooks

If you have been enjoying the reliability and cost savings that come with using open source software in your schools, just wait until you start using open source textbooks! There are several projects already underway. Here's a VERY short look at what's going on:

Wikibooks - <http://textbook.wikipedia.org/> Started in July of 2003 the project has 20 books in process with over 300 modules written. - This project has the advantage of good momentum and it's based on the successful wikipedia project. <http://www.wikipedia.org/>

COSTP: California Open Source Textbook Project

<http://www.opensourcetext.org/index.htm> If it can work in California or Texas, the rest of the world will follow. I'm interested to see progress updates as they are posted on this project. There are some good links to California standards but no content on the site yet.

OTP: Open Textbook Project <http://otp.inlimine.org/> This site is just starting, no content yet.

<http://open-education.org> - Open-Education - Good discussion of issues.

<http://ocw.mit.edu/index.html> - MIT OpenCourseware - They're already doing it.

Open Source Implementation in Business

eWeek, The Enterprise Newsweekly

This publication covers the topic, Linux and Open Source, pretty thoroughly from the enterprise perspective.

<http://www.eweek.com/category2/0,1738,1237915,00.asp>

The most recent Linux and Open Source News page is here.

<http://www.eweek.com/category2/0,1738,1238060,00.asp>

Open Source: Predicting a Happy New Year

By Philip H. Albert

LinuxInsider

12/21/04 5:00 AM PT

<http://www.linuxinsider.com/story/39120.html>

In 2005, open source will become respectable for big business. It is true that many big businesses already have respect for open-source software, such as IBM, Oracle and Sun. Even Microsoft has developed a healthy respect for open source as a formidable adversary.

Slew of Fears Slows Open-Source Uptake

By Darryl K. Taft

eWeek Linux and Open Source

January 22, 2005

The biggest question facing open-source developers is, after Linux, what can be done to spur efforts toward complete open-source software stacks?

After researching open-source use in large enterprises, [SourceLabs Inc.](#), a Seattle startup founded by former Microsoft Corp. and BEA Systems Inc. executives, may have discovered why broad adoption of open-source technology beyond Linux has been slow.

SourceLabs found that difficulty in acquiring technology; concerns about licensing constraints; and a lack of integration, testing and support all contribute to the slow adoption of open-source technology.

<http://www.eweek.com/article2/0,1759,1753474,00.asp>

***The Role Of Open Source And Microsoft:
Mitch Kapor, Mozilla Chairman, Speaks Out***

By David Storm
February 23, 2005

Summary: Software architect and former venture capitalist Mitch Kapor now heads the Open Source Applications Foundation and serves as chairman of the Mozilla Foundation. He spent some time emailing with Editor-in-Chief David Strom about where Mozilla and Microsoft are going, and the general state of the software industry.

Q: What are your views on when you use open source versus when you develop with commercial software

Let's distinguish between products you use and projects you undertake. For the former, it feels too purist to say "I will only use open source." Sometimes the best tool for the job happens to be proprietary. At the same time, being thoughtful about trying to assemble a working set of open source tools seems totally reasonable. Linux-based desktops, for instance, require a fair amount of upkeep. Is it worth it? And compared to what? These days, so does a Windows desktop, with all of the virus and spyware problems. Personally, I use a Mac as I don't want to be my own system administrator. On the other hand, if you are already a sysadmin, the incremental effort to do it for yourself is a lot less.

In creating a new [project](#), I think you have to look at your goals. If it is possible to create an open source solution, then good, but I don't think you can assume that it's always going to be possible. If you're trying to build a business around the project, then you have to think through how you expect to get revenue. Sometimes a consulting and service model will work on top of an open source code base, but not always.

<http://www6.tomshardware.com/business/20050223/index.html#>

Desktop Summit 2005: Linux' Chic Factor

Linux has gained enormous ground in the server market, where ease of use takes a back seat to stability. Administrators, many of whom are geeks to the core, usually have no problem working in command line, writing up PERL scripts, and fighting package dependencies. While this is great for administrators, have Linux developers and distributors ignored the desktop user?

<http://www.tomshardware.com/business/20050214/index.html>

Open Source Implementation in Government

The General Services Administration (GSA) and The Center of Open Source & Government are co-organizing a conference entitled "IT Acquisition: Open Standards ... www.egovos.org/

Open Source Nevada

The mission of this web hub is to bring together entrepreneurs, business development experts, and educators who share a vision of Open Source as a [technology paradigm shift](#) that can help Nevada cross the digital divide so that all can share the promise of the New Economy.

<http://www.osnv.org/bin/view/Central/WebHome>

LA Investigates Open Source To Cut Costs

By Dibya Sarkar

Federal Computer Week

02/24/05 5:00 AM PT

Thom Rubel, vice president of government strategies at META Group, said one benefit of open source is that it forces government officials to inventory, map and review their IT systems, platforms and applications. But he said they must consider the business value before making a decision.

<http://www.linuxinsider.com/story/40828.html>

In July 2002, UK Government published a new policy on the use of Open Source Software. ... Government Open Source Software Trials Final Report.

www.ogc.gov.uk/index.asp?docid=2190

State of Oregon proposed legislation requires state government to consider using open source software when acquiring new software.

<http://www.leg.state.or.us/03reg/measures/hb2800.dir/hb2892.intro.html>

Road to Open Source

By Lisa Vaas

January 6, 2003

eWeek Linux and Open Source

Rhode Island put itself on the cutting edge of hot-technology uptake last year when it became one of the first state governments to get beyond traditional government conservatism and implement open-source technology. The gamble is paying off: The bill for the state's rules and regulations database came in at \$40,000—only \$6,000 of which was hardware costs—and took one consultant four months working only two days a week to complete.

<http://www.eweek.com/article2/0,3959,808852,00.asp>

Open Source Software Institute

...mission is to promote the development and implementation of open-source software solutions within US federal and state government agencies and academic institutions.

<http://oss-institute.org>

IBM, Brazil Partner to Promote Open Source

By Stephen J. Vaughn-Nichols

eWeek Linux and Open Source

September 9, 2004

IBM and the Brazilian government announced Thursday that they have signed a cooperation agreement to establish a knowledge and technology center, known as CDTC, which will promote and develop open-source and Linux solutions in Brazil.

<http://www.eweek.com/article2/0,1759,1644315,00.asp>

The government open source dynamic

By Robin Bloor, Bloor Research

7th January 2005 09:43 GMT

http://www.theregister.co.uk/2005/01/07/gov_open_source_dynamic

The news just broke that the Venezuelan government is planning to migrate to Open Source, having issued a decree to central government organizations to draft plans for migration.

The decree involves three phases of migration beginning with central government, then regional government and finally municipal government. Central ministries covered in the first phase are being asked to complete the migration within two years (unless they can demonstrate that the time frame cannot be met). The Venezuelan government has founded an Open Source academy in the city of Merida in an effort to provide a supply of capable staff.

This is yet another straw in the wind as regards global government commitments to and enthusiasm for Open Source. There is currently a remarkable amount of proposed legislation world wide that mandates the use of Open Source in government.

The countries where this is the case are: Argentina, Brazil, Bulgaria, Chile, Colombia, France, Italy and Peru. However, such legislation has previously been proposed and rejected in many countries simply because a blanket technology mandate is rarely practical.

More telling, in terms of a clear enthusiasm for Open Source are countries where a stated policy of a "preference" for Open Source has been declared. Countries where this is the case, in some areas of government IT use, include: Bahrain, Belgium, China and Hong Kong, Costa Rica, France, Germany, Iceland, Israel, Italy, Malaysia, Poland, Portugal, Philippines and South Africa.

Beyond this, almost all governments have R&D projects which are investigating the practicality of Open Source for government use which will, in all probability lead to local policy guidelines at some point which favour open source.

There are three significant motivations for government sponsorship of Open Source. First of all, government spend on technology is very high and thus the idea of an established viable Open Source alternative to proprietary software is appealing because it must lead to cost reductions, either because it provides a bargaining position (against proprietary vendors) or because it replaces more expensive proprietary software.

Secondly, for most governments, proprietary software is an import which does little to enrich the economy, while an Open Source initiative is likely to promote the development of a local software industry.

Finally, governments usually see Open Source as a means of promoting IT standards which have the potential to reduce technology costs in the medium to long term – not just in the government sector but in the local economy. This is particularly important in less developed countries where the cost of IT is simply too high for many local businesses.

These many government initiatives are likely to have a far ranging impact on software technology in general because they will eventually legitimize and promote Open Source in many areas, particularly on the PC. Government promotion of Open Source is now becoming an established world wide trend and it is unlikely to be reversed.